

Appendix A

The following identifies the changes that the present submission makes to Claims 1, 2, 5, 6, 22-24, 26, 34-36, and 47-50 of U.S. Patent Application Serial No. 09/660,317 (M-8633 US).

1. (Amended) A light emitting device having a stack of layers including semiconductor layers comprising an active region, said device comprising:
a transparent lens attached to said stack by a bond effected at an interface disposed between said lens and [bonded to] said stack.

2. (Amended) The light emitting device of Claim 1, wherein a shape of said lens is selected from the group [consisting] of Weierstrass sphere, hemisphere, portions of a sphere less than a hemisphere, ellipsoid, and portions of an ellipsoid.

5. (Amended) The light emitting device of Claim 1, wherein said lens is formed from a material selected from the group [consisting] of optical glass, III-V semiconductors, II-VI semiconductors, group IV semiconductors and compounds, metal oxides, metal fluorides, diamond, yttrium aluminum garnet, and combinations thereof.

6. (Amended) The light emitting device of Claim 1, wherein said lens is formed from a material selected from the group [consisting] of zirconium oxide, sapphire, GaP, ZnS, materials containing lead oxide, and SiC.

22. (Amended) The light emitting device of Claim 20, wherein said superstrate layer is formed from a material selected from the group [consisting] of sapphire, SiC, GaN, and GaP.

23. (Amended) The light emitting device of Claim 20, wherein said lens is formed from a material selected from the group of zirconium oxide, sapphire, materials containing lead oxide, SiC, and ZnS, said superstrate is formed from a material selected from the group [consisting] of SiC, GaN, and sapphire, and said semiconductor layers comprise III-Nitride semiconductors.

24. (Amended) The light emitting device of Claim 20, wherein said lens is formed from a material selected from the group of zirconium oxide, sapphire, materials containing lead oxide, SiC, ZnS, and GaP, said superstrate is formed from a III-Phosphide material, and said semiconductor layers comprise a material selected from the group of III-Phosphide semiconductors and III-Arsenide semiconductors.

26. (Amended) The light emitting device of Claim 25, wherein said transparent bonding layer is formed from a material selected from the group [consisting] of optical glass, chalcogenide glass, III-V semiconductors, II-VI semiconductors, group IV semiconductors, organic semiconductors, metals, metal oxides, metal fluorides, yttrium aluminum garnet, phosphides, arsenides, antimonides, nitrides, and combinations thereof.

34. (Amended) The light emitting device of Claim 32, wherein said superstrate layer is formed from a material selected from the group [consisting] of sapphire, SiC, GaN, and GaP.

35. (Amended) The light emitting device of Claim 32, wherein said lens is formed from a material selected from the group of zirconium oxide, sapphire, materials containing lead oxide, SiC, and ZnS, said superstrate is formed from a material selected from the group [consisting] of SiC, GaN, and sapphire, and said semiconductor layers comprise III-Nitride semiconductors.

36. (Amended) The light emitting device of Claim 32, wherein said lens is formed from a material selected from the group of zirconium oxide, sapphire, materials containing lead oxide, SiC, ZnS, and GaP, said superstrate is formed from a III-Phosphide material, and said semiconductor layers comprise a material selected from the group of III-Phosphide semiconductors and III-Arsenide semiconductors.

47. (Amended) A light emitting device having a stack of layers including semiconductor layers comprising an active region, said device comprising:
a transparent lens attached to said stack by a bond effected at an interface disposed between said lens and [bonded to] said stack; and

a first contact and a second contact electrically coupled to apply a voltage across said active region;

wherein said stack of layers comprises at least one III-Phosphide semiconductor layer and said first contact and said second contact are disposed on a same side of said stack.

48. (Amended) The light emitting device of Claim 47 wherein said lens comprises a material selected from the group of zirconium oxide, sapphire, materials containing lead oxide, SiC, and GaP.

49. (Amended) A light emitting device having a stack of layers including semiconductor layers comprising an active region, said device comprising:

a transparent lens attached to said stack by a bond effected at an interface disposed between said lens and [bonded to] said stack; and

a first contact and a second contact electrically coupled to apply a voltage across said active region;

wherein said stack of layers comprises at least one III-Nitride semiconductor layer and said first contact and said second contact are disposed on a same side of said stack.

50. (Amended) The light emitting device of Claim 49 wherein said lens comprises a material selected from the group of zirconium oxide, sapphire, materials containing lead oxide, SiC, and ZnS.